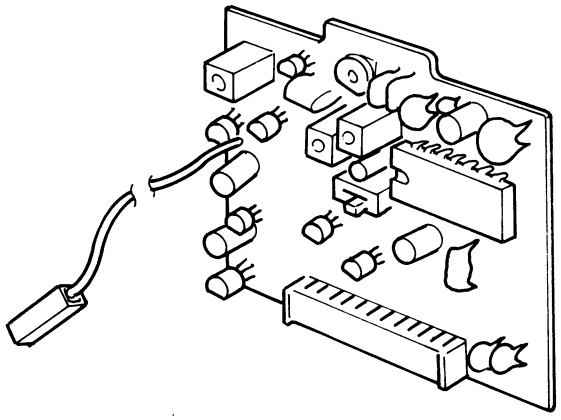
OPK-202

SERVICE MANUAL

AEP Model



November, 1983

SECAM color signals broadcast in Eastern Germany, as well as PAL color signals, can be received by installing this adaptor on any Sony color TV set designed to receive the PAL system which utilizes the PE3 chassis.

MICROFILM

SECAM ADAPTOR

SONY®

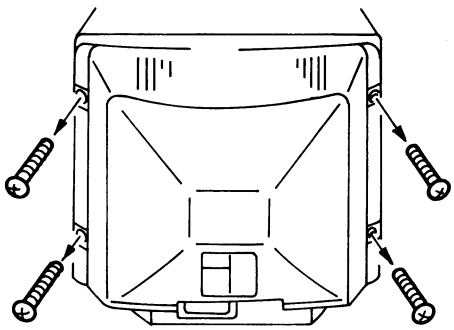
ACC

SECTION 1
INSTALLATION

Note: Numbers refer to the corresponding numbers in the illustrations.

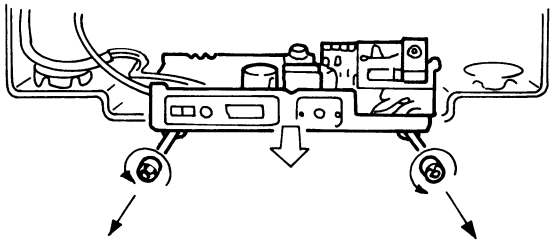
1. Unscrew and remove the rear panel.

1

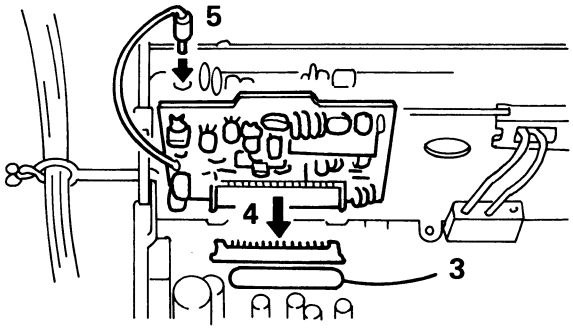


2. Unfasten the screws and pull out the main D-board. When cords are clamped, unfasten the plastic retainers, so that the main D-board can be withdrawn easily.

2

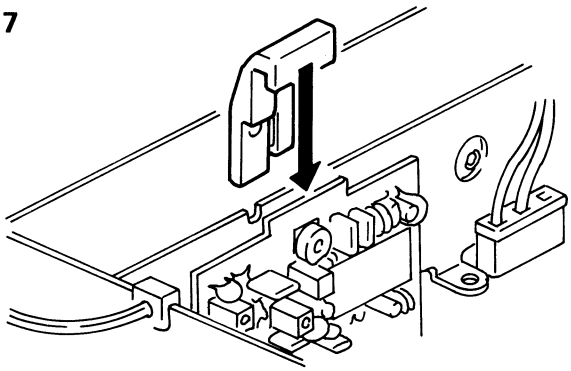


3. Cut off the five soldered connections marked SCN: JW 208, 209, 210, 211, 213 on the D-board.
4. Insert the adaptor into the D-20 board as shown.
5. Insert the connector to the D-24 on the board.
6. Connect the power plug, and check that the SECAM program is displayed in color.



7. Secure the adaptor with the supplied adaptor holder.
8. Disconnect the plug again and reinstall the main D-board and cords as they were and tighten the screws on the board and rear panel.

7



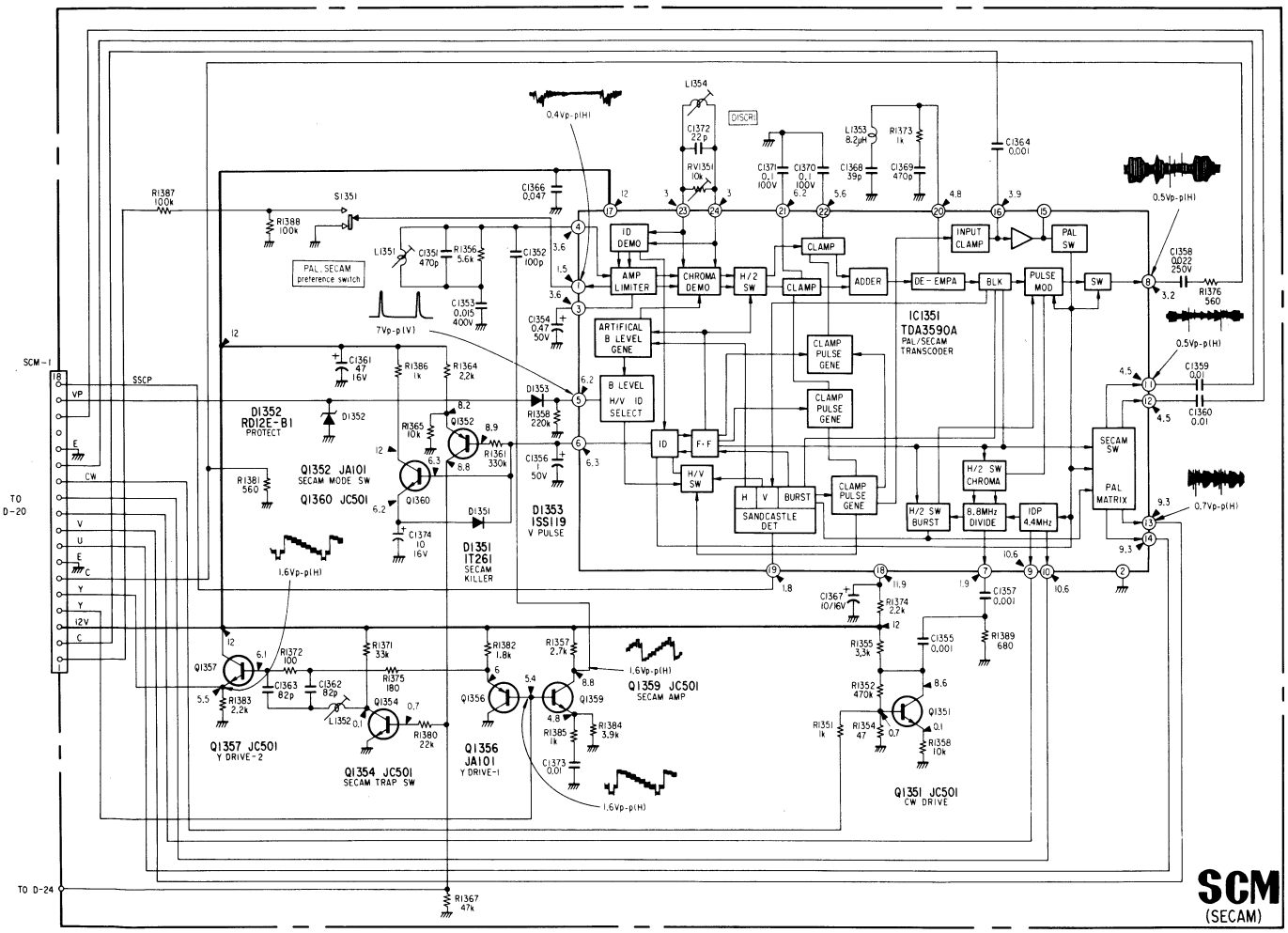
SECTION 2
ADJUSTMENT

DISCRI ADJUSTMENT

1. *Feed in a SECAM COLOR Bar pattern from a COLOR -bar/pattern generator.*
2. *Set the picture control and brightness control of the initial state.*
3. *Adjust RV1351 and L1354 for the color tones are optimum.*

SECTION 3
DIAGRAMS

3-1. SCHEMATIC DIAGRAM



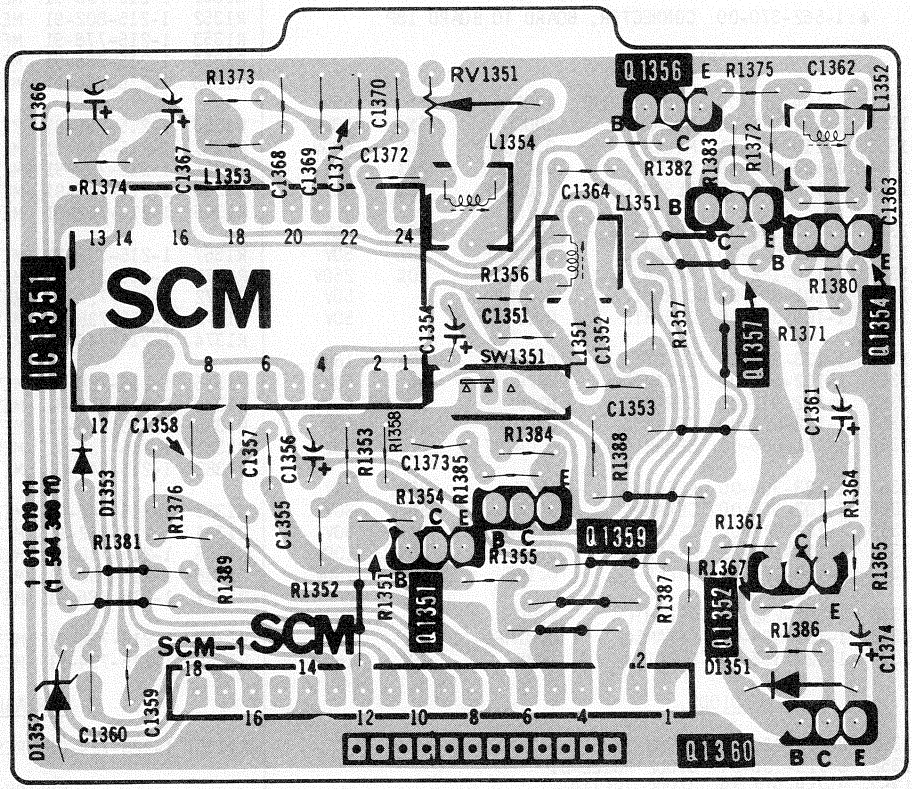
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/6 W unless otherwise noted. k: 1000 Ω, M: 1000 kΩ
- ▭ : adjustment for repair.
- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- ▬ : B+ bus.
- Readings are taken with a SECAM color-bar signal input.

3-2. PRINTED WIRING BOARD

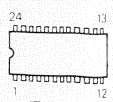
– Conductor Side –

Q, IC	D	ADJ
1356		RV1351
1357		
1354		
IC1351		
	1353	
1359		
1351		
1352		
	1352	
	1351	
1360		

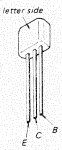


● SEMICONDUCTORS

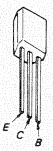
TDA3590A



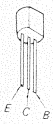
2SA1175
2SC2785



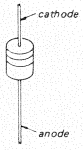
2SC1048
2SC2458



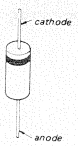
JA101
JC501



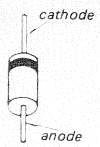
1SS119



1T261



RD12E-B1



SCM

SECTION 4

ELECTRICAL PARTS LIST

NOTE:

- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

Ref.No.	Part No.	Description			Remark
♦	A-1135-230-A	SCM BOARD, COMPLETE **********			
♦	1-562-370-00	CONNECTOR, BOARD TO BOARD 18P			
		CAPACITOR			
C1351	1-104-069-00	POLYSTYRENE	470PF	5% 50V	
C1352	1-102-973-00	CERAMIC	100PF	5% 50V	
C1353	1-110-192-81	MYLAR	0.015MF	10% 400V	
C1354	1-123-351-89	ELECT	0.47MF	20% 50V	
C1355	1-102-074-00	CERAMIC	0.001MF	10% 50V	
C1356	1-123-380-00	ELECT	1MF	20% 50V	
C1357	1-102-074-00	CERAMIC	0.001MF	10% 50V	
C1358	1-110-182-81	MYLAR	0.022MF	10% 250V	
C1359	1-101-004-00	CERAMIC	0.01MF	50V	
C1360	1-101-004-00	CERAMIC	0.01MF	50V	
C1361	1-123-332-00	ELECT	47MF	20% 16V	
C1362	1-102-971-00	CERAMIC	82PF	5% 50V	
C1363	1-102-971-00	CERAMIC	82PF	5% 50V	
C1364	1-102-074-00	CERAMIC	0.001MF	10% 50V	
C1366	1-101-006-00	CERAMIC	0.047MF	50V	
C1367	1-123-356-00	ELECT	10MF	20% 16V	
C1368	1-102-965-00	CERAMIC	39PF	5% 50V	
C1369	1-102-824-00	CERAMIC	470PF	5% 50V	
C1370	1-110-175-81	MYLAR	0.1MF	10% 100V	
C1371	1-110-175-81	MYLAR	0.1MF	10% 100V	
C1372	1-102-892-00	CERAMIC	22PF	5% 50V	
C1373	1-101-004-00	CERAMIC	0.01MF	50V	
C1374	1-123-356-00	ELECT	10MF	20% 16V	
		DIODE			
D1351	8-719-026-11	DIODE 1T261			
D1352	8-719-100-64	DIODE RD12E-B1			
D1353	8-719-911-19	DIODE 1SS119			
		IC			
IC1351	8-759-909-63	IC TDA3590A			
		COIL			
L1351	1-404-497-00	COIL			
L1352	1-404-498-00	COIL			
L1353	1-408-408-00	MICRO INDUCTOR 8.2UH			
L1354	1-404-496-00	COIL			
		TRANSISTOR			
Q1351	8-729-178-54	TRANSISTOR 2SC2785			
Q1352	8-729-117-54	TRANSISTOR 2SA1175			
Q1354	8-729-178-54	TRANSISTOR 2SC2785			
Q1356	8-729-117-54	TRANSISTOR 2SA1175			
Q1357	8-729-178-54	TRANSISTOR 2SC2785			
Q1359	8-729-178-54	TRANSISTOR 2SC2785			
Q1360	8-729-178-54	TRANSISTOR 2SC2785			

Ref.No.	Part No.	Description			Remark
		RESISTOR			
R1351	1-215-738-91	METAL	1K	5% 1/6W	
R1352	1-215-802-91	METAL	470K	5% 1/6W	
R1353	1-215-778-91	METAL	47K	5% 1/6W	
R1354	1-215-706-91	METAL	47	5% 1/6W	
R1355	1-215-750-91	METAL	3.3K	5% 1/6W	
R1356	1-215-756-91	METAL	5.6K	5% 1/6W	
R1357	1-215-748-91	METAL	2.7K	5% 1/6W	
R1361	1-215-798-91	METAL	330K	5% 1/6W	
R1364	1-215-746-91	METAL	2.2K	5% 1/6W	
R1365	1-215-762-91	METAL	10K	5% 1/6W	
R1367	1-215-778-91	METAL	47K	5% 1/6W	
R1371	1-215-774-91	METAL	33K	5% 1/6W	
R1372	1-215-714-91	METAL	100	5% 1/6W	
R1373	1-215-738-91	METAL	1K	5% 1/6W	
R1374	1-215-746-91	METAL	2.2K	5% 1/6W	
R1375	1-215-720-91	METAL	180	5% 1/6W	
R1376	1-215-732-91	METAL	560	5% 1/6W	
R1380	1-215-770-91	METAL	22K	5% 1/6W	
R1381	1-215-732-91	METAL	560	5% 1/6W	
R1382	1-215-744-91	METAL	1.8K	5% 1/6W	
R1383	1-215-746-91	METAL	2.2K	5% 1/6W	
R1384	1-215-752-91	METAL	3.9K	5% 1/6W	
R1385	1-215-738-91	METAL	1K	5% 1/6W	
R1386	1-215-738-91	METAL	1K	5% 1/6W	
R1387	1-215-786-91	METAL	100K	5% 1/6W	
R1388	1-215-786-91	METAL	100K	5% 1/6W	
R1389	1-215-734-91	METAL	680	5% 1/6W	
		VARIABLE RESISTOR			
RV1351	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K			
		SWITCH			
SW1351	1-553-716-00	SWITCH, SLIDE			

****

ACCESSORIES AND PACKING MATERIALS
****

Part No.	Description	Remark
♦ 2-274-525-00	LABEL (NO.5), MODEL NAME	
4-302-759-00	LABEL, SERIAL NUMBER	
4-493-864-41	MANUAL, INSTRUCTION	